ABSTRACT

A method of configuring a direction-based Core Based Tree (CBT) for a CBT-based overly multicast includes: requesting and receiving an arbitrary terminal node which intends to subscribe to the CBT of information on a child node pre-subscribed to a core node; calculating a direction between the arbitrary terminal node receiving the child node information from the core node and each of the received child nodes, to transmit information to the core node on the child node of the core node having a minimum resultant value along with a subscription request message; receiving the subscription request message transmitted from the terminal node and the child node information from the core node, and comparing a resultant direction calculation value of the corresponding child node and terminal node with a resultant direction calculation value between the pre-subscribed child nodes and allowing the terminal node to subscribe to a child node or a parent node of the corresponding child node to configure the CBT in response thereto; and, periodically transmitting and receiving a hello packet between the core node and the terminal node, and among the parent , child and brother nodes so that a state of the corresponding node is confirmed and to reconfigure the configured CBT in response to the confirmed state.